



# How Maternal Safety Bundles Save Lives

Debra Bingham, DrPH, RN, FAAN

Executive Director, Institute for Perinatal Quality Improvement

# Disclosures

Debra Bingham is the Executive Director of the Institute for Perinatal Quality Improvement and is a consultant for the:

- National Perinatal Information Center
- Association of Women's Health, Obstetric and Neonatal Nurses.
- I will not discuss any off-label use/or investigational use in my presentation.

# 17 Year Research to Action Gap

“It now takes an average of 17 years for new knowledge generated by randomized controlled trials to be incorporated into practice, and even then application is highly uneven.”

Institute of Medicine (2001). Crossing the quality chasm: A new health system for the 21<sup>st</sup> Century, pg. 5.

The mission of the Institute for Perinatal Quality Improvement (PQI) is to expand the use of improvement science in order to eliminate preventable perinatal morbidity and mortality and end perinatal racial and ethnic disparities.



***After participation in this presentation, you should have an increased knowledge and enhanced competence to...***

- 1) Describe why the maternal safety bundles are needed.
- 2) Outline the key recommendations in changing practices and tips to implement these changes.





Don't be afraid to look at your QI data.

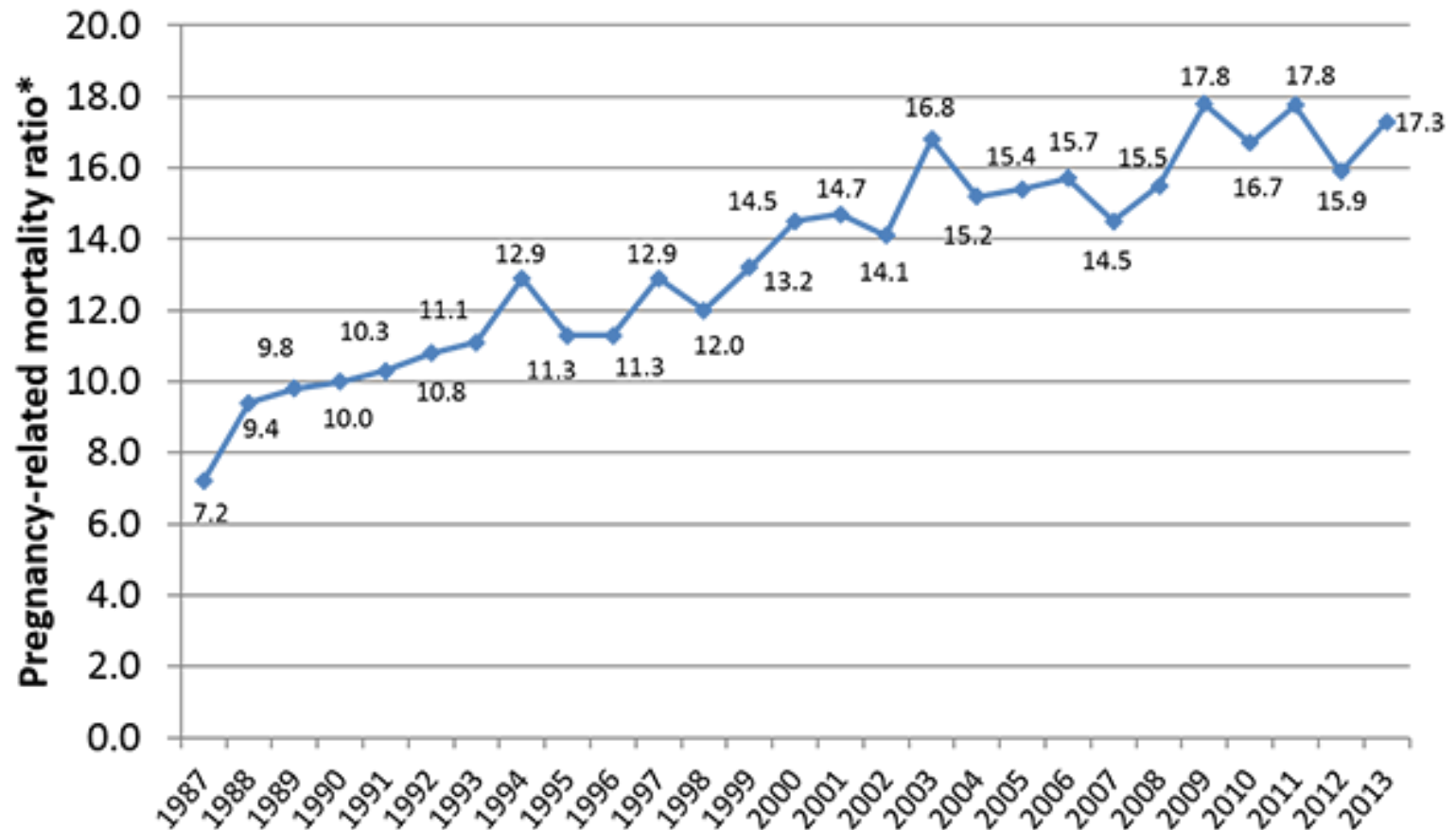
Data helps us know what improvements are needed.



# INSTITUTE FOR PERINATAL QUALITY IMPROVEMENT

## Trends in Maternal Morbidity and Mortality

## Trends in pregnancy-related mortality in the United States: 1987–2013



\*Note: Number of pregnancy-related deaths per 100,000 live births per year.

<https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pmss.htm>



*Original Research*

# Recent Increases in the U.S. Maternal Mortality Rate

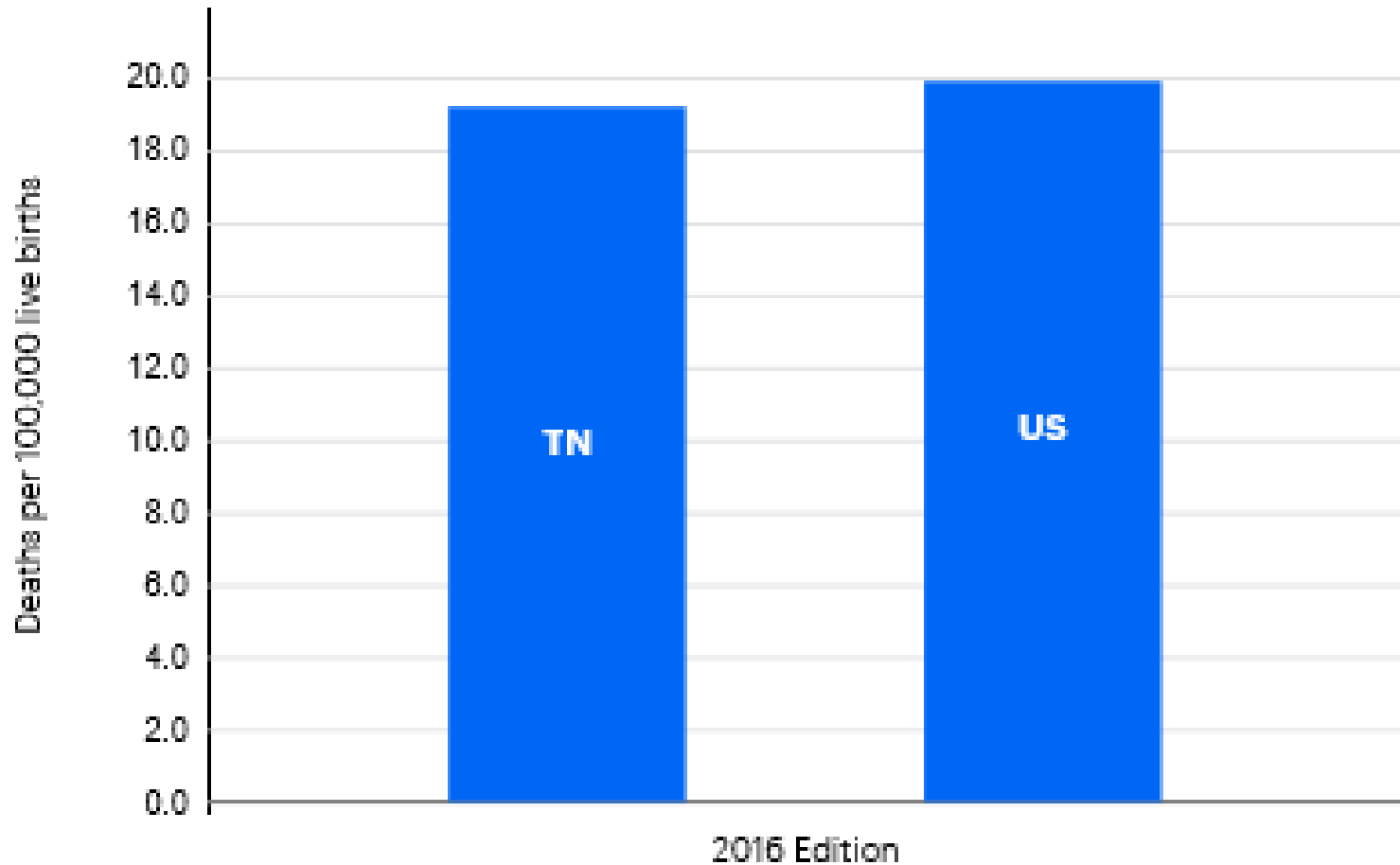
*Disentangling Trends From Measurement Issues*

*Marian F. MacDorman, PhD, Eugene Declercq, PhD, Howard Cabral, PhD, and Christine Morton, PhD*

“Simply totaling the raw, unadjusted data from all states results in a reported U.S. maternal mortality rate that more than doubled from 9.8 maternal deaths per 100,000 live births in 2000 to 21.5 deaths per 100,000 live births in 2014.”

MacDorman, M.F., Declercq, E., Cabral, H., and Morton, C. (2016). Recent increases in the U.S. maternal mortality rate. *Obstetrics & Gynecology*.

# America's Health Rankings



[https://www.americashealthrankings.org/explore/2016-health-of-women-and-children-report/measure/maternal\\_mortality/state/TN/](https://www.americashealthrankings.org/explore/2016-health-of-women-and-children-report/measure/maternal_mortality/state/TN/)

# The Leading Causes of Pregnancy-Related Mortality

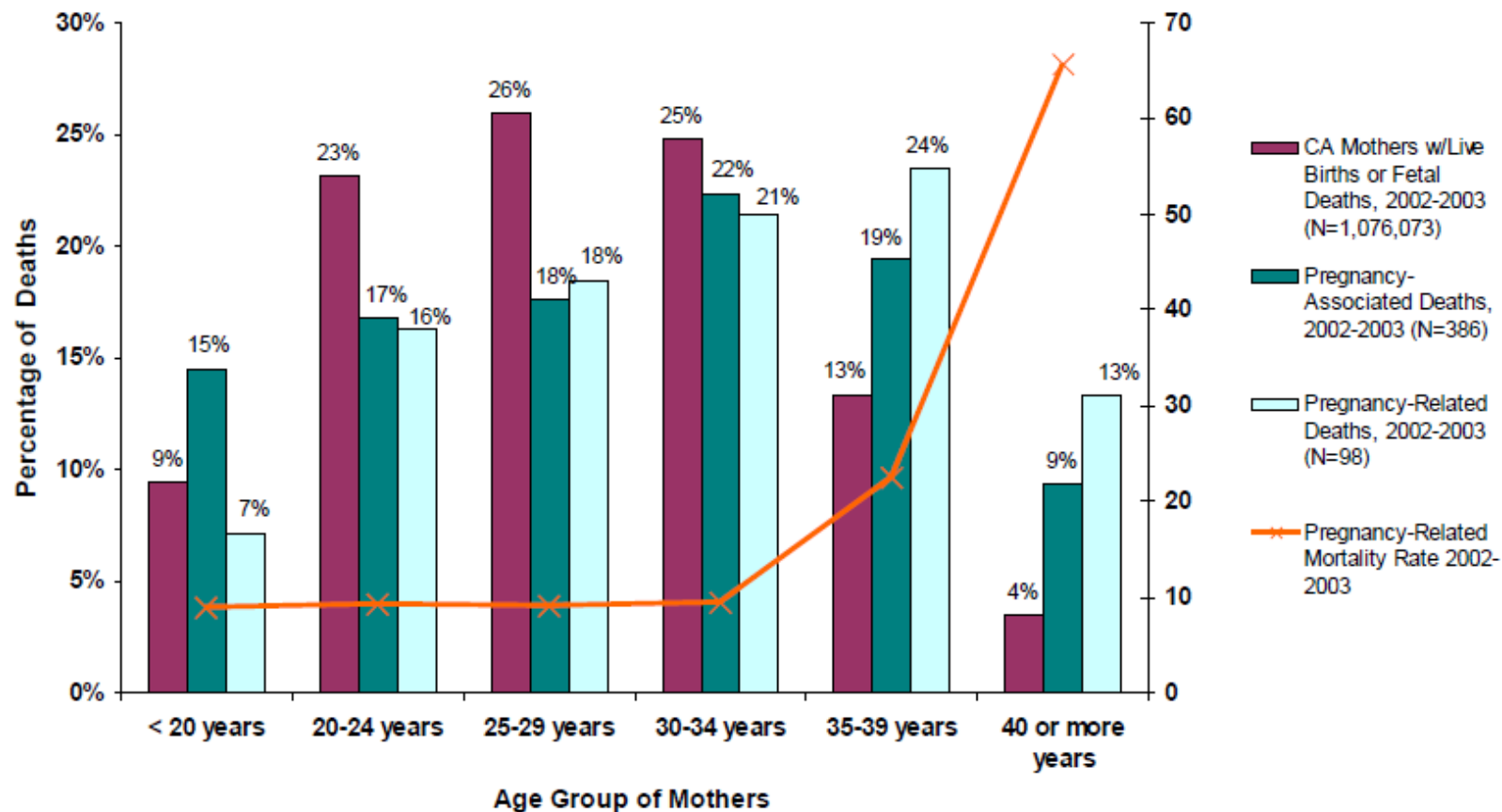
Causes of deaths has shifted over time. Currently in the United States the leading causes of the 2011-2013 deaths are:

- Cardiovascular diseases, 15.5%.
- Non-cardiovascular diseases, 14.5%.
- Infection or sepsis, 12.7%.
- Hemorrhage, 11.4%.
- Cardiomyopathy, 11.0%.
- Thrombotic pulmonary embolism, 9.2%.
- Hypertensive disorders of pregnancy, 7.4%.
- Cerebrovascular accidents, 6.6%.
- Amniotic fluid embolism, 5.5%.
- Anesthesia complications, 0.2%.

<https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pmss.htm>

# We Need System, Clinical, and Population Health Strategies

## Age of Mother at Death and Pregnancy-Related Deaths Rates, California; 2002-2003



California Department of Public Health (2011). The California pregnancy associated mortality review: Report from 2002 and 2003 Maternal Death Reviews. Pg. 27.



# Lessons Learned from

- **Hemorrhagic death**
  - 93% of all deaths were potentially preventable
  - Lack of appropriate attention to clinical signs of hemorrhage
  - Failure to restore blood volume, to act decisively with life saving interventions
- **Severe Hypertension**
  - 60% of maternal deaths were potentially preventable
  - Failure to control blood pressure, to recognize HELLP syndrome, to diagnosis and treat pulmonary edema
- **Pulmonary Embolism**
  - “single cause of death most amenable to reduction by systematic change in practice”
  - Failure to use adequate prophylaxis

Berg CJ, et al. Obstet Gynecol 2005;106:1228-34;  
Cantwell R, et al. BJOG 2011 Mar;118 Suppl 1:1-203;  
Clark, SL. Semin Perinatol 2012;36(1):42-7

# In the United States Racial Disparities Persist

- 12.7 deaths per 100,000 live births for white women.
- 43.5 deaths per 100,000 live births for black women.
- 14.4 deaths per 100,000 live births for women of other races.

Much of these disparities are due to structural racism

<https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pmss.htm>

Maternal Mortality is the Tip of the Iceberg

# PERINATAL QUALITY IMPROVEMENT

- 1998-1999 compared to 2008-2009
- 75% increase in severe maternal complications
  - 183% increase in blood transfusions

Callaghan, W.M., Creanga, A.A., and Kuklina, E.V. (2012). Severe maternal morbidity among delivery and postpartum hospitalizations in the United States. *Obstetrics & Gynecology*.



# Secondary Trauma Reported

- 35% of the 464 labor and delivery nurse members of AWHONN who responded to a national survey reported moderate to severe levels of secondary traumatic stress
- Some reported that the stress was so severe they were considering no longer being L&D nurses

Beck, C.T. and Gable, R.K. (2012). A mixed methods study of secondary traumatic stress in labor and delivery nurses. Journal of Obstetric, Gynecologic & Neonatal Nursing. Pp. 1-14

Women and newborns die or suffer injuries because they do not receive early, effective and aggressive lifesaving treatments.



California Department of Public Health (2011). The California pregnancy associated mortality review: Report from 2002 and 2003 Maternal Death Reviews. National Health Statistics.



*QI Saves Lives!*  
*[www.perinatalQI.org](http://www.perinatalQI.org)*



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**#POSTBIRTH  
Action Community**

Helping perinatal health professionals expand their use of improvement science to eliminate preventable perinatal injuries and deaths.

**QI SAVES LIVES!**

**SIGN IN**



# Definition of QI

*“When we use the term “QI” in this report, we mean systematic, **data-guided** activities designed to bring about immediate, **positive changes** in the delivery of health care in particular settings.”*

Baily, M.A., Bottrell, M., Lynn, J., & Jennings (2006). Special report: the ethics of using QI methods to improve healthcare quality and safety. The Hastings Center: Garrison New York, pg. S5.

# Who has the responsibility for improving the quality of care?

*“We conclude that engaging in quality improvement is **NOT** purely **Discretionary**; health professionals, managers, delivery organizations, patients, and government all have an ethical responsibility to cooperate with one another to improve the quality of care.”*

Baily, M.A., Bottrell, M., Lynn, J., & Jennings (2006). Special report: the ethics of using QI methods to improve healthcare quality and safety. The Hastings Center: Garrison New York, pg. S6.

*Have you received education on QI concepts, methods, and tools?*



# Clinicians need QI Education & QI Support

- QI Methods and Concepts
  - Implementation Frameworks
  - QI Process Models
  - QI Ethics
- QI Tools
  - Process Maps
  - Fishbone Diagrams
  - Logic Models
  - Driver Diagrams



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Ends 11/30/17

# Implementing Perinatal Quality Improvement

[www.perinatalQI.org](http://www.perinatalQI.org)

Conference on February 1, 2018, New York City



# INSTITUTE FOR PERINATAL QUALITY IMPROVEMENT

## National Maternal Safety Bundles



# Council on Patient Safety in Women's Health Care

[www.safehealthcareforeverywoman.org](http://www.safehealthcareforeverywoman.org)

**COUNCIL ON PATIENT SAFETY  
IN WOMEN'S HEALTH CARE**  
safe health care for every woman

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We encourage you to [contact us](#) to learn more about our mission, purpose and offerings.

**Meet the Council Members**  
The Council on Patient Safety in Women's Health Care's purpose is a unique consortium of organizations across the spectrum of women's health who have come together to promote safe health care for every woman. We invite you to find out more about the member organizations who make the Council possible. Without their dedication, support and continual input, we would not be able to provide the comprehensive support available on this site. Meet the Council Members [by clicking here](#).

**Get the SMM Reporting Forms**  
Get access to the [Severe Maternal Morbidity \(SMM\) Reporting Forms](#) easily and quickly (registration required).

**Download Severe Maternal Morbidity (SMM) Reporting Forms**

Below, please find links to the Severe Maternal Morbidity Reporting forms. We have provided them in both Microsoft Word and Adobe PDF formats. Click on the links below the thumbnail images to download the forms:

**Forms with Drop-Down Boxes**

[MS Word \(Editable\)](#)  
[Adobe PDF \(Can be completed in-form\)](#)

**Facility Administrative Review**

[MS Word \(Editable\)](#)  
[Adobe PDF \(Can be completed in-form\)](#)



**Dr. Bingham was the Vice Chair and Chair of the Council**

# Council on Patient Safety in Women's Health Care Bundles

[www.safehealthcareforeverywoman.org](http://www.safehealthcareforeverywoman.org)

The screenshot displays the website's header with the logo and navigation links: About Us, Patient Safety Bundles, Patient Safety Tools, Safety Action Series, Quality Improvement Competitions, and AIM Program. A dropdown menu for 'Patient Safety Bundles' is open, listing various bundles with '+AIM' indicators. The main content area features a large image of hands on a computer mouse with the text 'CREATE A FREE ACCOUNT' and 'ACCESS TO PATIENT'. The browser's address bar shows the URL 'safehealthcareforeverywoman.org/patient-safety-bundles/#tab-maternal'. The Windows taskbar at the bottom shows several open applications and the system clock at 1:05 PM on 1/3/2017.

**COUNCIL ON PATIENT SAFETY  
IN WOMEN'S HEALTH CARE**  
safe health care for every woman

About Us Patient Safety Bundles Patient Safety Tools Safety Action Series Quality Improvement Competitions AIM Program

Maternal Safety Bundles +  
Non-Obstetric Bundles +

- Maternal Mental Health: Depression and Anxiety
- Maternal Venous Thromboembolism (+AIM)
- Obstetric Hemorrhage (+AIM)
- Reduction of Peripartum Racial/Ethnic Disparities (+AIM)
- Safe Reduction of Primary Cesarean Birth (+AIM)
- Severe Hypertension in Pregnancy (+AIM)
- Support After a Severe Maternal Event (+AIM)

CREATE A FREE ACCOUNT  
SAFE

ACCESS TO PATIENT

safehealthcareforeverywoman.org/patient-safety-bundles/#tab-maternal

premature-birth-r....pdf Outline for Appro....doc 2016 Presenter\_....docm 2016 Presenter\_....docm IPEC-2016-Update....pdf Show all

Ask me anything 91% 1:05 PM 1/3/2017



# Maternal Bundles


- Maternal Mental Health: Depression and Anxiety
- Alliance on Maternal Health (AIM)
  - Safety Bundles
    - Obstetric Hemorrhage
    - Maternal Venous Thromboembolism
    - Severe Hypertension in Pregnancy
  - Safe Reduction of Primary Cesarean Birth
  - Support after a Severe Maternal Event
  - Reduction of Peripartum Racial/Ethnic Disparities

# HRSA -- Alliance on Innovation in Maternal Health (AIM)

Priorities for AIM are:

- Reducing cesarean sections
- 3 safety bundles  
(Hemorrhage, Venous Thromboembolism, Hypertension)
- Preconception Care
- Reducing Disparities

# National Partnership for Patient Safety Maternal Safety Bundles



“What every birthing facility  
in the U.S. should have...”

# All Safety Bundles Include Recommendations to:

- Hold Team Huddles
- Debrief After Events
- Run Simulation Drills

“What every birthing facility  
in the U.S. should have...”

JOGNN

EXPERT OPINION

## Transforming Communication and Safety Culture in Intrapartum Care: A Multi-Organization Blueprint

Audrey Lyndon, M. Christina Johnson, Debra Bingham, Peter G. Napolitano, Gerald Joseph, David G. Maxfield,  
and Daniel F. O’Keeffe

JOGNN

EXPERT OPINION

## Standardized Severe Maternal Morbidity Review: Rationale and Process

Sarah J. Kilpatrick, Cynthia Berg, Peter Bernstein, Debra Bingham, Ana Delgado, William M. Callaghan,  
Karen Harris, Susan Lanni, Jeanne Mahoney, Elliot Main, Amy Nacht, Michael Schellpfeffer, Thomas Westover,  
and Margaret Harper

JOGNN

EXPERT OPINION

## National Partnership for Maternal Safety: Consensus Bundle on Obstetric Hemorrhage

Elliott K. Main, Dena Goffman, Barbara M. Scavone, Lisa Kane Low, Debra Bingham, Patricia L. Fontaine,  
Jed B. Gorlin, David C. Lagrew, and Barbara S. Levy

Co-Published in Journals for ACOG, ACNM, ASA, and AWHONN





## READINESS

### *Every unit*

- Hemorrhage cart with supplies, checklist, and instruction cards for intrauterine balloons and compressions stitches
- Immediate access to hemorrhage medications (kit or equivalent)
- Establish a response team - who to call when help is needed (blood bank, advanced gynecologic surgery, other support and tertiary services)
- Establish massive and emergency release transfusion protocols (type-O negative/uncrossmatched)
- Unit education on protocols, unit-based drills (with post-drill debriefs)

## RECOGNITION & PREVENTION

### *Every patient*

- Assessment of hemorrhage risk (prenatal, on admission, and at other appropriate times)
- Measurement of cumulative blood loss (formal, as quantitative as possible)
- Active management of the 3rd stage of labor (department-wide protocol)

## RESPONSE

### *Every hemorrhage*

- Unit-standard, stage-based, obstetric hemorrhage emergency management plan with checklists
- Support program for patients, families, and staff for all significant hemorrhages

## REPORTING/SYSTEMS LEARNING

### *Every unit*

- Establish a culture of huddles for high risk patients and post-event debriefs to identify successes and opportunities
- Multidisciplinary review of serious hemorrhages for systems issues
- Monitor outcomes and process metrics in perinatal quality improvement (QI) committee

# PATIENT SAFETY BUNDLE

# Obstetric Hemorrhage

# Obstetric Hemorrhage Commentary

JOGNN

EXPERT OPINION

## National Partnership for Maternal Safety: Consensus Bundle on Obstetric Hemorrhage

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Jed B. Gorlin, David C. Lagrew, and Barbara S. Levy

Main, E.K., Goffman, D., Scavone, B.M., Low, L.K., Bingham, D.,  
Gorlin, J.B., Lagrew, D.C., & Levy, B.S. (2015). National  
partnership for maternal safety: consensus bundle on hemorrhage.  
*Journal of Obstetric, Gynecologic, and Neonatal Nursing*. pp. 1-10.  
[www.safehealthcareforeverywoman.org](http://www.safehealthcareforeverywoman.org)



# INSTITUTE FOR PERINATAL QUALITY IMPROVEMENT

How front-line leaders can utilize the safety bundles



# Mobilize - Change Champions

Explain **WHY** the change is needed

- A committed leader will not give up
- A confident change champion feels they are up to the task and will keep trying

Weiner, B.J. (2009). A theory of organizational readiness for change. Implementation Science. Doi:10.1186/1748-5908-4-67

# FOCUS ON BEHAVIORS





## SAFE REDUCTION OF PRIMARY CESAREAN BIRTHS: SUPPORTING INTENDED VAGINAL BIRTHS

### READINESS

*Every Patient, Provider and Facility*

- Build a provider and maternity unit culture that values, promotes, and supports spontaneous onset and progress of labor and vaginal birth and understands the risks for current and future pregnancies of cesarean birth without medical indication.
- Optimize patient and family engagement in education, informed consent, and shared decision making about normal healthy labor and birth throughout the maternity care cycle.
- Adopt provider education and training techniques that develop knowledge and skills on approaches which maximize the likelihood of vaginal birth, including assessment of labor, methods to promote labor progress, labor support, pain management (both pharmacologic and non-pharmacologic), and shared decision making.

### RECOGNITION AND PREVENTION

*Every patient*

- Implement standardized admission criteria, triage management, education, and support for women presenting in spontaneous labor.
- Offer standardized techniques of pain management and comfort measures that promote labor progress and prevent dysfunctional labor.
- Use standardized methods in the assessment of the fetal heart rate status, including interpretation, documentation using NICHD terminology, and encourage methods that promote freedom of movement.
- Adopt protocols for timely identification of specific problems, such as herpes and breech presentation, for patients who can benefit from proactive intervention before labor to reduce the risk for cesarean birth.

## PATIENT SAFETY BUNDLE

# Safe Reduction of Primary Cesarean Births

<http://safehealthcareforeverywoman.org/>

# Examples of Key Behaviors: Safe Reduction of Primary Cesarean Births

- Build a culture that values, promotes, and supports vaginal birth
- Ensure informed consent
- Provide labor support that maximizes the likelihood of vaginal birth
  - Reduce early admissions
  - Encourage freedom of movement in labor
  - Non-pharmacologic pain management
- Standardize induction scheduling to ensure proper selection and preparation of women undergoing induction
- Adopt policies that outline standard responses to abnormal fetal heart rate patterns and uterine activity
- Offer breech version, instrumented delivery, and twin delivery
- Track cesarean birth statistics



## READINESS

*Every Unit*

- Use a standardized thromboembolism risk assessment tool for VTE during:
  - Outpatient prenatal care
  - Antepartum hospitalization
  - Hospitalization after cesarean or vaginal deliveries
  - Postpartum period (up to 6 weeks after delivery)

## RECOGNITION & PREVENTION

*Every Patient*

- Apply standardized tool to all patients to assess VTE risk at time points designated under "Readiness"
- Apply standardized tool to identify appropriate patients for thromboprophylaxis
- Provide patient education
- Provide all healthcare providers education regarding risk assessment tools and recommended thromboprophylaxis

## RESPONSE

*Every Unit*

- Use standardized recommendations for mechanical thromboprophylaxis
- Use standardized recommendations for dosing of prophylactic and therapeutic pharmacologic anticoagulation
- Use standardized recommendations for appropriate timing of pharmacologic prophylaxis with neuraxial anesthesia

## REPORTING/SYSTEMS LEARNING

*Every Unit*

- Review all thromboembolism events for systems issues and compliance with protocols
- Monitor process metrics and outcomes in a standardized fashion
- Assess for complications of pharmacologic thromboprophylaxis

# PATIENT SAFETY BUNDLE

# Maternal Venous Thromboembolism Prevention

<http://safehealthcareforeverywoman.org/>

# Examples of Key Behaviors: Venous Thromboembolism Bundle

- Risk Assessments
  - Prenatal Care
  - Antepartum, Intrapartum, & Postpartum hospitalization
  - Postpartum (up to 6 weeks)
- Provide and Time Prophylaxis based on Risk and Plan of Care
  - Chemical and Mechanical



# Hypertension

## READINESS

### *Every Unit*

- Standards for early warning signs, diagnostic criteria, monitoring and treatment of severe preeclampsia/eclampsia (include order sets and algorithms)
- Unit education on protocols, unit-based drills (with post-drill debriefs)
- Process for timely triage and evaluation of pregnant and postpartum women with hypertension including ED and outpatient areas
- Rapid access to medications used for severe hypertension/eclampsia: Medications should be stocked and immediately available on L&D and in other areas where patients may be treated. Include brief guide for administration and dosage.
- System plan for escalation, obtaining appropriate consultation, and maternal transport, as needed

## RECOGNITION & PREVENTION

### *Every Patient*

- Standard protocol for measurement and assessment of BP and urine protein for all pregnant and postpartum women
- Standard response to maternal early warning signs including listening to and investigating patient symptoms and assessment of labs (e.g. CBC with platelets, AST and ALT)
- Facility-wide standards for educating prenatal and postpartum women on signs and symptoms of hypertension and preeclampsia

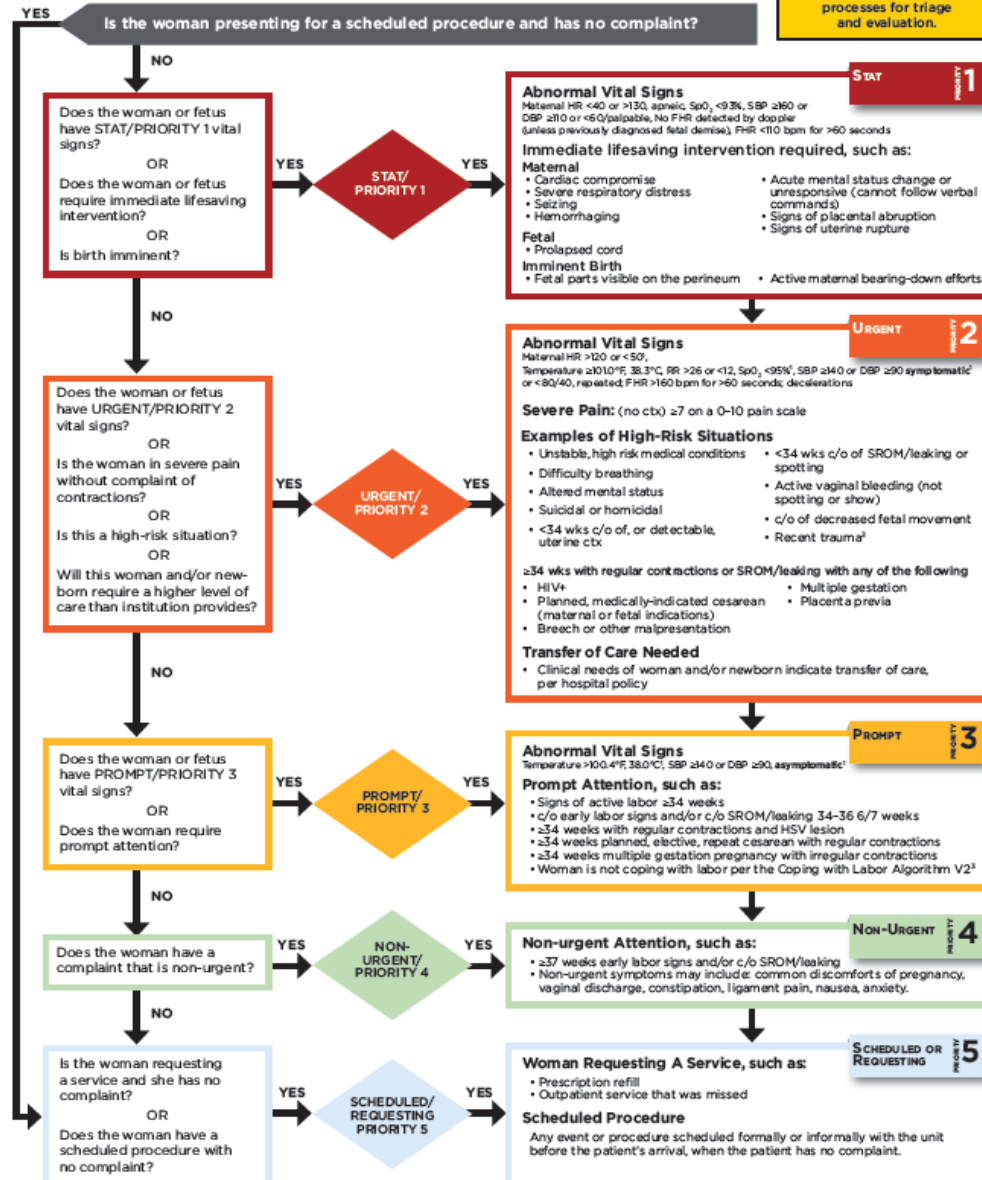
<http://safehealthcareforeverywoman.org/>



# Examples of Key Behaviors: Hypertension Bundle

- Accurately Assess Blood Pressures
- Clear Diagnostic Guidelines with checklists based on blood pressure
- Timely Triage, evaluation, and treatment of pregnant and postpartum women
  - Labor and Delivery
  - Emergency Department
  - Outpatient areas

## Maternal Fetal Triage Index (MFTI)



Implement appropriate infectious disease control processes for triage and evaluation.

Ruhl, C., Scheich, B.,  
Onokpise, B., and Bingham,  
D. (2015). Content validity  
testing of the maternal fetal  
triage index. *Journal of  
Obstetric, Gynecologic, and  
Neonatal Nursing: JOGNN /  
NAACOG*. doi: 10.1111/1552-  
6909.12763

Ruhl, C., Scheich, B., Onokpise, B., and Bingham, D. (2015). Interrater reliability testing of the maternal fetal triage index. *Journal of Obstetric, Gynecologic, and Neonatal Nursing: JOGNN / NAACOG*. doi: 10.1111/1552-6909.12762.

<sup>1</sup>High Risk and Critical Care Obstetrics, 2013

<sup>2</sup>Trauma may or may not include a direct assault on the abdomen. Examples are trauma from motor vehicle accidents, falls, and intimate partner violence.

<sup>3</sup>Coping with Labor Algorithm V2 used with permission

The MFTI is exemplary and does not include all possible patient complaints or conditions. The MFTI is designed to guide clinical decision-making but does not replace clinical judgement. Vital signs in the MFTI are suggested values. Values appropriate for the population and geographic region should be determined by each clinical team, taking into account variables such as altitude.

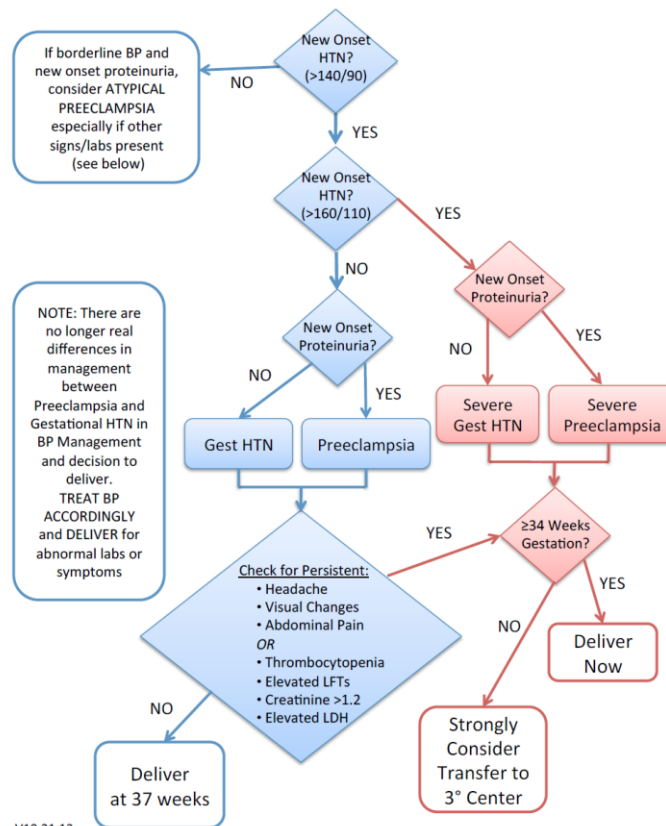
©2014 Association of Women's Health, Obstetrics and Neonatal Nurses. For permission to use MFTI or integrate the MFTI into the Electronic Medical Record contact [permissions@awhonn.org](mailto:permissions@awhonn.org)

# Minimum Requirements for the Hypertension Protocol

- Notify primary care provider if the systolic BP  $\geq$  160 or diastolic BP  $\geq$  110 for two measurements within 15 minutes
- After the 2<sup>nd</sup> elevated reading, treatment should be initiated ASAP (preferably within 60 minutes)
  - Magnesium sulfate
  - Add other medications if no response
  - Admit to ICU based on pre-defined criteria
  - Follow-up within 7 to 14 days postpartum
  - Provide postpartum patient education

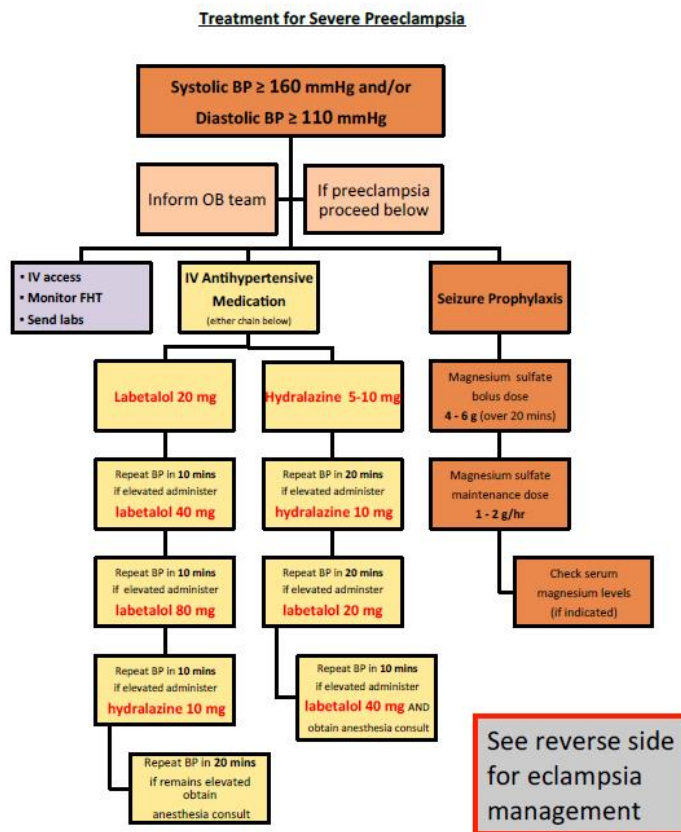
Appendix C: Suspected Preeclampsia Algorithm Diagnosis and Management

Suspected Preeclampsia Flowchart  
Diagnosis and Management



CMQCC Preeclampsia Care Guidelines and CMQCC  
Preeclampsia Toolkit. <https://www.cmqcc.org/resources-toolkits/toolkits/preeclampsia-toolkit>

## Appendix B: Sample Treatment of Severe Preeclampsia Algorithm



CMQCC Preeclampsia Care Guidelines and CMQCC  
Preeclampsia Toolkit. <https://www.cmqcc.org/resources-toolkits/toolkits/preeclampsia-toolkit>



# Preparing to Take a Blood Pressure

- Equipment:
  - Correct cuff size
  - Keep equipment in repair
- Position:
  - Sitting or semi-reclining position with back supported
  - Arm at heart level
  - Legs uncrossed
  - Feet on a flat surface, not dangling
- Patient sits quietly for 5 minutes before taking the blood pressure
- History
  - Intake of nicotine and caffeine in the past 30 minutes?
  - Do not delay treatment based on history

CMQCC Preeclampsia Care Guidelines and CMQCC  
Preeclampsia Toolkit. <https://www.cmqcc.org/resources-toolkits/toolkits/preeclampsia-toolkit>

# Taking an Accurate Blood Pressure

- Support the patient's arm at heart level
- Patient should be instructed not to talk
- Use first audible sound (Kortokoff I)
- Use disappearance of sound (Kortokoff V)
- Nearest 2 mmHg
- Use the highest reading
- If greater than or equal to 140/90, repeat in 15 minute. If still elevated evaluate for Preeclampsia

CMQCC Preeclampsia Care Guidelines and CMQCC Preeclampsia Toolkit. <https://www.cmqcc.org/resources-toolkits/toolkits/preeclampsia-toolkit>



## READINESS

### Every unit

- Hemorrhage cart with supplies, checklist, and instruction cards for intrauterine balloons and compressions stitches
- Immediate access to hemorrhage medications (kit or equivalent)
- Establish a response team - who to call when help is needed (blood bank, advanced gynecologic surgery, other support and tertiary services)
- Establish massive and emergency release transfusion protocols (type-O negative/uncrossmatched)
- Unit education on protocols, unit-based drills (with post-drill debriefs)

## RECOGNITION & PREVENTION

### Every patient

- Assessment of hemorrhage risk (prenatal, on admission, and at other appropriate times)
- Measurement of cumulative blood loss (formal, as quantitative as possible)
- Active management of the 3rd stage of labor (department-wide protocol)

## RESPONSE

### Every hemorrhage

- Unit-standard, stage-based, obstetric hemorrhage emergency management plan with checklists
- Support program for patients, families, and staff for all significant hemorrhages

## REPORTING/SYSTEMS LEARNING

### Every unit

- Establish a culture of huddles for high risk patients and post-event debriefs to identify successes and opportunities
- Multidisciplinary review of serious hemorrhages for systems issues
- Monitor outcomes and process metrics in perinatal quality improvement (QI) committee

## PATIENT SAFETY BUNDLE

# Obstetric Hemorrhage

<http://safehealthcareforeverywoman.org/>

# Examples of Key Behaviors: Obstetric Hemorrhage Bundle

- Perform Risk Assessments on Prenatal, Admission, Pre-Birth, and Post-Birth
- Implement Quantification of Blood Loss
- Implement an obstetric hemorrhage algorithm based on blood loss
- Debrief after all Stage 2 and 3 hemorrhages
- Huddles for high-risk women
- Run Obstetric Simulation Drills

# Set A Goal

## Quality Improvement Aim

### Statement

- By April 2018 the nurses and physicians at Fabulous Hospital will perform hemorrhage risk assessments on admission, pre-birth, and post-birth, quantify blood loss at every birth, use actual blood loss to determine actions, debrief, accurately take blood pressures, and administer anti-hypertensives within 60 min. if the B/P is 160/110.
- We will track our progress by....



# Track Progress

- Structure
  - Update policies and procedures
  - Simulation drills
  - Educate clinical team
- Process
  - Quantification of Blood loss
  - Risk Assessments
- Outcomes – with Balancing Measures
  - ICU admission
  - Blood transfusions
- Balancing Measures when indicated

Quality  
Improvement  
is like  
climbing a  
spiral  
staircase

Each cycle gets you closer to your goal





Without data QI  
leaders can go  
around &  
around in a  
circle like  
a cat  
chasing  
her tail

# Your Commitment is a Key to Success



## Committed Leaders Overcome All Barriers



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QUALITY  
IMPROVEMENT**

Early Bird  
Registration  
Ends 11/30/17

# Implementing Perinatal Quality Improvement

[www.perinatalQI.org](http://www.perinatalQI.org)

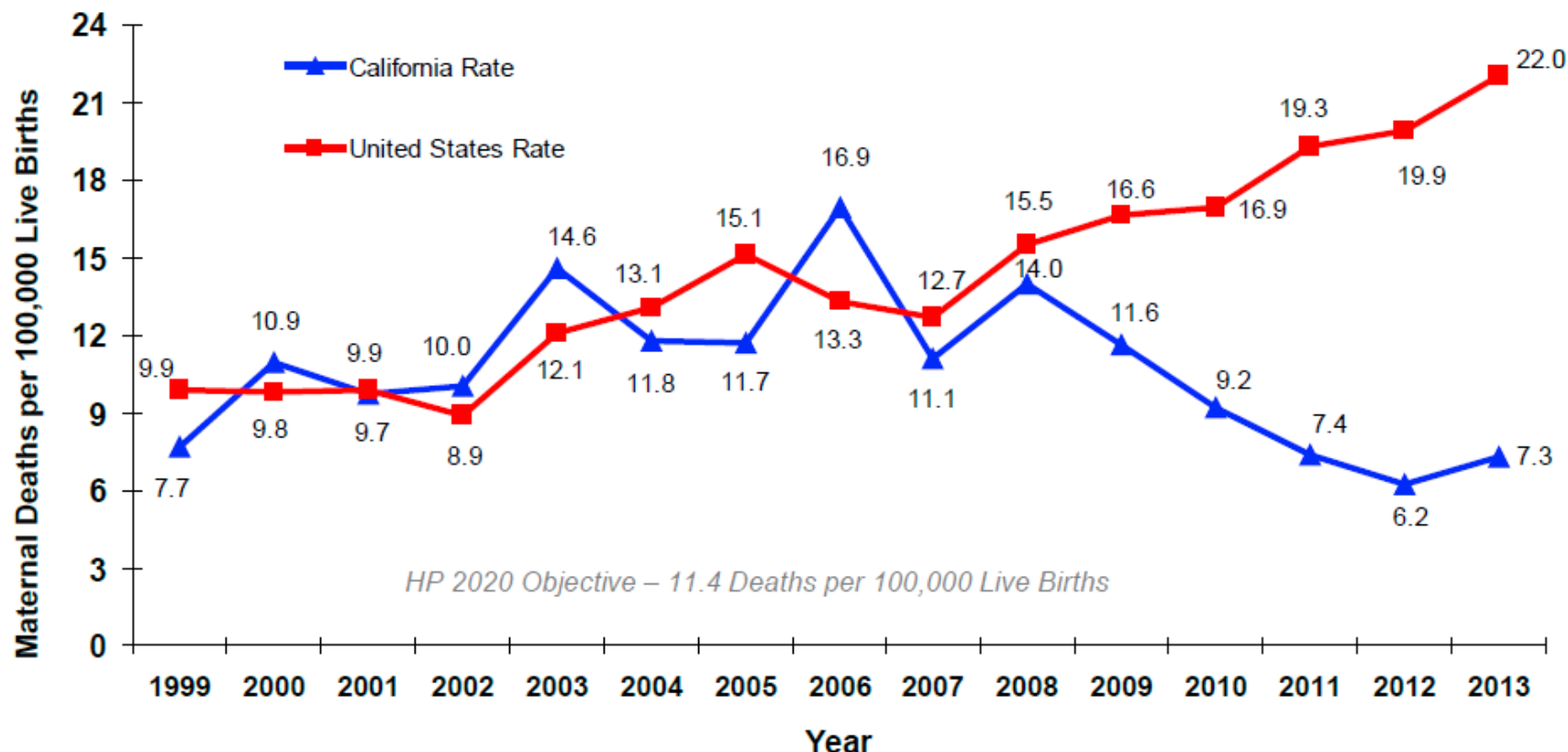
Conference on February 1, 2018, New York City



# Monet's Water Lilly Pond



# Maternal Mortality Rate, California and United States; 1999-2013



SOURCE: State of California, Department of Public Health, California Birth and Death Statistical Master Files, 1999-2013. Maternal mortality for California (deaths  $\leq$  42 days postpartum) was calculated using ICD-10 cause of death classification (codes A34, O00-O95, O98-O99). United States data and HP2020 Objective use the same codes. U.S. maternal mortality data is published by the National Center for Health Statistics (NCHS) through 2007 only. U.S. maternal mortality rates from 2008 through 2013 were calculated using CDC Wonder Online Database, accessed at <http://wonder.cdc.gov/on> March 11, 2015. Produced by California Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Division, May, 2015.



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## PQI Action Briefs Launch 11/30/17

- 1) Maternal and neonatal morbidity and mortality case study slide sets (2 per year)
- 2) Facilitator notes
- 3) Action Plan Templates with sample  
Fishbone Diagram, Driver Diagram, & Logic Model



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